Office of the Fire Marshal

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GROUP HOMES

March 2003

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GUIDELINE

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March 2003

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Abstract

This guideline is intended, using the current regulatory frameworks of both the Ontario Building Code and the Ontario Fire Code, to assist group home owners/operators to better understand the current fire safety standards that apply to the facilities they are operating. With this information, group home owners/operators can make more informed decisions about the physical environments intended to accommodate their residents. While individual group home circumstances can vary, it is hoped that the guideline will be used by building and fire code enforcement officials in making more uniform decisions in the application and interpretation of their respective regulations.

Notice

This document has been prepared by the Office of the Fire Marshal (Ministry of Public Safety and Security), the Ministry of Municipal Affairs and Housing and the Ministry of Community, Family and Children's Services for the purpose of providing general information only. It is not intended to and does not provide a legal interpretation of any Provincial statute or regulation. For accurate reference, the reader should refer to the legal text of the applicable statute or regulation.

Abbreviations

BDB	Building and Development Branch
FSC	Fire Safety Commission
LSS	Life Safety Study
MCFCS	Ministry of Community, Family and Children's Services
MMAH	Ministry of Municipal Affairs and Housing
MOHLTC	Ministry of Health and Long-Term Care
MPSS	Ministry of Public Safety and Security
NFPA	National Fire Protection Association
OBC	Ontario Building Code
OFC	Ontario Fire Code
OFM	Office of the Fire Marshal

1.0 INTRODUCTION

The term "group home" is used, in the context of this guideline, to describe government funded and/or licensed for-profit, non-profit, or directly operated residential accommodation in which the residents receive some form of supervisory care for physical, developmental or emotional disabilities.

Group home residents may be adults or children and may receive care services under a variety of different programs/models. These programs/models range from a highly supported setting in which residents with multiple disabilities receive 24 hr. supervisory care to a low support setting in which adult residents are capable of independent living but receive periodic visits from an off-site caseworker. This guideline, however, does not apply to hospitals, nursing homes, and other similar treatment facilities. As well, the guideline does not apply to open or secure youth detention facilities and other similar correctional facilities.

The majority of group homes within the scope of this guideline are monitored by the Ministry of Community, Family and Children's Services (MCFCS) in accordance with various legislation including the *Child and Family Services Act* and the *Developmental Services Act*. Some are administered through the Ministry of Health and Long Term Care (MOHLTC) under the *Homes for Special Care Act*.

Regardless of the licensing and/or funding provisions under other legislation, group home owners/operators must also comply with the Ontario Building Code (OBC) and the Ontario Fire Code (OFC). The specific application of the OBC and OFC to both new and existing group homes is described in this guideline. The guideline is intended to provide clarity in connection with the classification of group homes under the two codes. In particular, the guideline provides comment on the reference to "single housekeeping unit," which forms part of the care occupancy (B3) exemption and is tied to the definition of a dwelling unit in the OBC. The guideline also suggests criteria and an evaluation methodology for determining when "assistance in evacuation", as referenced in the OBC and OFC, may be necessary. Finally, the guideline includes design suggestions to assist owners/operators and enforcement officials to evaluate methods for complying with specific code requirements in consideration of operational and program needs.

To minimize uncertainty and confusion about the application of the codes, group home owners/operators are encouraged to initiate early dialogue with building and fire code enforcement officials. It is important that code enforcement officials be provided with sufficient information related to the building use and resident evacuation capabilities so that appropriate decisions on classification and code application can be made. Where the fire safety objectives significantly compromise operational or program needs, owners/operators may wish to retain the services of independent design professionals familiar with the various compliance options of the applicable codes. Code enforcement officials are encouraged to consider individual operational and program needs and to exercise discretion where available within the framework of the codes.

2.0 ONTARIO BUILDING CODE AND ONTARIO FIRE CODE APPLICATION TO GROUP HOMES

2.1 Overview

The OBC and the OFC are companion regulations, under the *Building Code Act, 1992* and the *Fire Protection and Prevention Act, 1997* respectively, that address specific health and safety issues in buildings in Ontario. The OBC regulates *new* construction, additions, renovations, material alterations, and change of use in existing buildings. The OFC, in addition to containing maintenance provisions for features required under the OBC, also establishes minimum mandatory fire safety or "retrofit" standards for the life safety of occupants in *existing* buildings. The OFC may also be used to address activities that create a hazard and that are not allowed for in the original design of a building.

Compliance with the OBC involves a building permit process typically administered by the building department of a municipality.

The OFC is typically administered and enforced by the fire department of a municipality. Where compliance with the OFC involves a material alteration, such as required for compliance with the retrofit provisions, it may also be necessary to obtain a building permit.

Under the OBC and OFC, buildings are classified by the principal occupancy for which the building will be or is being used. For instance, a group home may be classified under the OBC as either a residential or care occupancy depending on a number of factors including the degree of care and/or treatment received by the residents and their ability to evacuate in case of an emergency. The classification of the building determines the applicable health and safety requirements.

2.2 Owner/Operator Responsibilities

Building and fire code enforcement officials may inspect buildings (including those under construction) for the purpose of verifying compliance with the codes; however, the statutory responsibility to comply resides with the owner/operator. It is, therefore, important that owners/operators become familiar with requirements of the OBC and OFC as they apply to group homes and to seek technical and legal advice as appropriate. The requirements of the OBC and OFC are based largely on the nature of the use of the building as declared at the time of construction or occupancy. Changes in use of the building over time, which were not accounted for at the time of permit issuance, may therefore have an impact on the safety of the residents. The statutory responsibility of owners/operators to comply with the codes extends to such changes in use. Change of use scenarios specific to group homes are described in Section 2.3.2 of this guideline.

2.3 Ontario Building Code Application

A permit issued by the municipal building department is required to:

- construct a new group home;
- construct an addition to a group home;
- renovate or materially alter a group home; or
- change the use of a building, as detailed in Article 2.4.1.2. of the OBC.

Under the OBC, each building or part of a building shall be classified according to its major occupancy. The major occupancy is the principal occupancy for which a building or part thereof is used or intended to be used, and includes subsidiary occupancies which are an integral part of the principal occupancy.

The term group home is not defined in the OBC, nor is it tied to any specific classification. The classification will depend on several factors including the type of facility and the physical characteristics of the building. Although there is no automatic group home classification, group homes are often classified as either residential occupancies (Group C) or care occupancies (Group B, Division 3). Within the residential classification, a group home may be considered a dwelling unit or a boarding, lodging or rooming house depending on the specific nature of the use. These classifications will determine the fire safety features, and other features, that must be met.

In the OBC, the classification of a group home is not linked to MCFCS or MOHLTC administered funding or licensing. The classification is determined solely from the definitions listed in Part 1 of the OBC.

Refer to the Group Home Occupancy Flow Chart following Section 2.3.2 of this guideline to determine the proper occupancy classification of a group home under the OBC.

2.3.1 Group B, Division 3 (B3) Occupancies

The Group B, Division 3 (B3) care occupancy classification was introduced in the OBC in 1997. This new occupancy category sets safety standards that are appropriate to facilities where long term or ongoing special or supervisory care is provided to people with physical or cognitive impairments. The B3 category can apply to a variety of care facilities, including but not limited to group homes. Examples of other types of B3 facilities are listed in Note A-3.1.2.1.(1) of Appendix A of the OBC and include children's custodial homes, convalescent homes and sanatoria with detention quarters. Group homes are not a defined term or class under the OBC, and, as with any type of facility, their classification depends on the composition and use of the building. Group homes are not classified as B3 by default; they may be classified as a residential occupancy (Group C) depending on the characteristics of each facility.

For group homes that are classified as care occupancies, the OBC allows for smaller care facilities with lower risk and vulnerability to not have to meet the B3 safety standards. Care facilities with not more than 10 residents and not more than two who require assistance in evacuation, and which operate as a housekeeping unit, may instead conform to the requirements for Group C residential occupancies (reference Article 3.1.2.5.).

The classification of a proposed building as a Group B, Division 3 occupancy under the OBC relates specifically and only to the prescribed OBC requirements for that building. This classification is not intended to be used as a tool in determining appropriate municipal zoning and does not have a direct relationship with institutional, residential or any other zoning classifications.

2.3.2 Change of Use Permits

In some cases, even when there are no material changes made to the building, a permit is required if the use of an existing building changes and could result in an increased hazard. In many cases, a change of use would result in a different classification under the OBC.

It is the owner/operator's responsibility to ensure a "change of use" permit is obtained when required. Sentence 2.4.1.2.(1) of the OBC identifies increased hazards that would require a change of use permit under Section 10 of the *Building Code Act, 1992*. The municipal building department, which would issue the change of use permit, can help to determine whether a change of use permit is needed according to the OBC.

As of July 1, 1993, change of use permits were required for group homes that were changed from operating as a dwelling unit to operating as a boarding, lodging or rooming house.

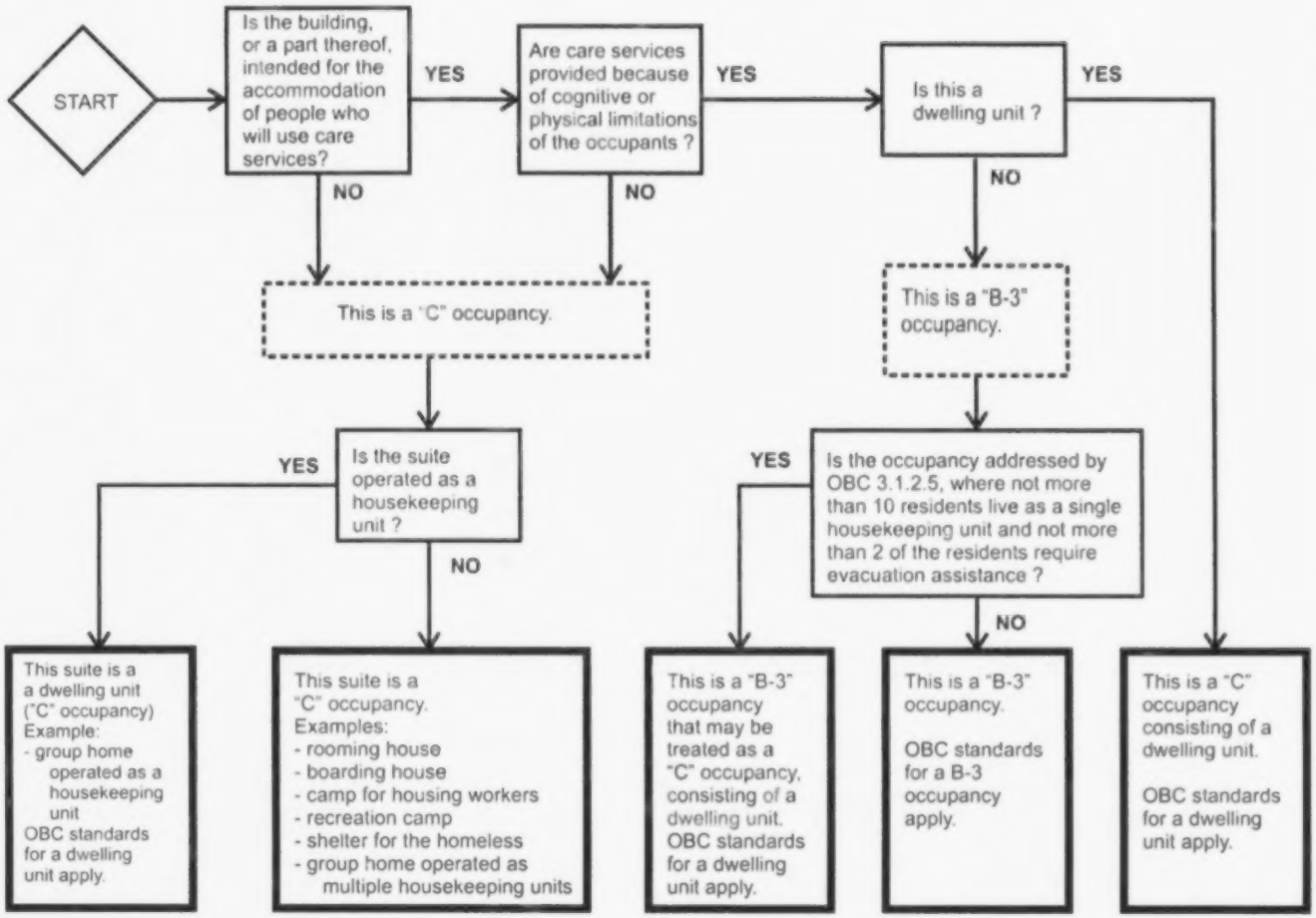
If a group home was changed to a care occupancy prior to April 6, 1998, a change of use permit is not required.

Where the change of use to a care occupancy took place on or after April 6, 1998, the owner of the group home is required to obtain:

- a change of use permit, if the change of use occurred without any construction; or
- a building permit, if the change of use occurred in conjunction with construction.

GROUP HOME OCCUPANCY
FLOW CHART

JANUARY, 2002


START
Is the building, or a part thereof, intended for the accommodation of people who will use care services?
YES
Are care services provided because of cognitive or physical limitations of the occupants ?
YES
Is this a dwelling unit ?
YES
NO
NO
NO
This is a "C" occupancy.
This is a "B-3" occupancy.
YES
Is the suite operated as a housekeeping unit ?
YES
Is the occupancy addressed by OBC 3.1.2.5, where not more than 10 residents live as a single housekeeping unit and not more than 2 of the residents require evacuation assistance ?
NO
NO
This suite is a a dwelling unit ("C" occupancy) Example:
- group home operated as a housekeeping unit
OBC standards for a dwelling unit apply.
This suite is a "C" occupancy. Examples:
- rooming house
- boarding house
- camp for housing workers
- recreation camp
- shelter for the homeless
- group home operated as multiple housekeeping units
This is a "B-3" occupancy that may be treated as a "C" occupancy, consisting of a dwelling unit. OBC standards for a dwelling unit apply.
This is a "B-3" occupancy.
OBC standards for a B-3 occupancy apply.
This is a "C" occupancy consisting of a dwelling unit.
OBC standards for a dwelling unit apply.

Building and Development Branch

2.4 Ontario Fire Code Application

The OFC is divided into nine parts of which only Parts 1, 2, 6 and 9 would typically be relevant to a group home setting. The remaining parts may be relevant if for example, certain hazardous activities, such as woodworking or spray painting, are carried out in the home or if flammable or combustible liquids are present.

Part 1 contains the various definitions used in the code. Part 2 contains general maintenance and fire safety planning provisions and Part 6 contains specific provisions for the maintenance of fire protection and emergency systems.

Part 9 of the OFC contains minimum mandatory life safety or "retrofit" provisions for various classes of existing buildings that are not in compliance with the OBC.

The specific OFC Part 9 application to group homes is shown in the flow chart following Section 2.4.2 of this guideline.

2.4.1 Ontario Fire Code Compliance Options

Under the OFC, the owner is responsible for complying with the code. Owner is defined, in part, to mean any person, firm or corporation having control over any portion of the building or property. This responsibility to comply with the OFC exists regardless of whether or not the premise has been inspected by the fire department.

Compliance with Part 9 of the OFC may be addressed in one of three ways:

- demonstrating compliance with the OBC as applicable to the building use
- complying with the prescribed retrofit provisions of the OFC as applicable to the building use
- implementing a Life Safety Study approved by the Chief Fire Official.

Compliance with the OBC

Part 9 of the OFC does not apply to buildings that satisfy the requirements of the Building Code. Building Code is defined to mean the Ontario Building Code made under the *Building Code Act* or a predecessor to that Act. Generally, buildings constructed or renovated in accordance with the OBC will achieve a higher standard of life safety than what is required under the retrofit provisions of the OFC. In fact, the change of use and renovation provisions in Parts 10 and 11 of the OBC respectively are predicated on the assumption that the minimum standards in Part 9 of the OFC have already been met.

Buildings purpose-built as group homes under any version of the OBC and that continue to be in compliance with the OBC are outside the scope of Part 9 of the OFC. This includes group homes which have received acknowledgement from the building department that they may be considered a dwelling unit/single housekeeping unit under Article 3.1.2.5. of the current OBC. Since this requirement stems from the OBC, it is the building official who must be satisfied that the criteria are met.

However, buildings originally built as dwelling units under the OBC and which were subsequently occupied as group homes operated as boarding, lodging and rooming houses or care occupancies, as defined, may no longer be in compliance with the OBC. As a consequence, these homes fall back within the scope of the OFC and are potentially in violation of the OBC change of use provisions. In these circumstances, there are two paths for compliance:

- If the change of use occurred on or after July 1, 1993, then compliance with the OBC and OFC is more appropriately addressed by applying for a change of use permit under the current OBC and ensuring that the minimum standards of Part 9 of the OFC are also met for the intended use.
- If the change occurred before July 1, 1993, then compliance may be achieved directly with Part 9 of the OFC or by pursuing compliance with the current OBC.

Compliance with Part 9 of the OFC

As previously noted, group homes that demonstrate compliance with the current or any previous version of the OBC for the intended use fall outside the scope of Part 9 of the OFC.

The flow chart following Section 2.4.2 of this guideline illustrates the application of Part 9 for group homes within the scope of Part 9 of the OFC. For instance:

- Homes for Special Care with four to 10 residents, must comply with residential retrofit provisions in Section 9.3.
- Homes for Special Care with more than 10 residents must comply with the institutional provisions in Section 9.4.
- Group homes licensed and/or regulated by MCFCS must specifically comply with Section 9.5.

Where the fire safety requirements prescribed in the applicable retrofit sections are incompatible with operational needs, a Life Safety Study outlining alternative methods of compliance may be undertaken.

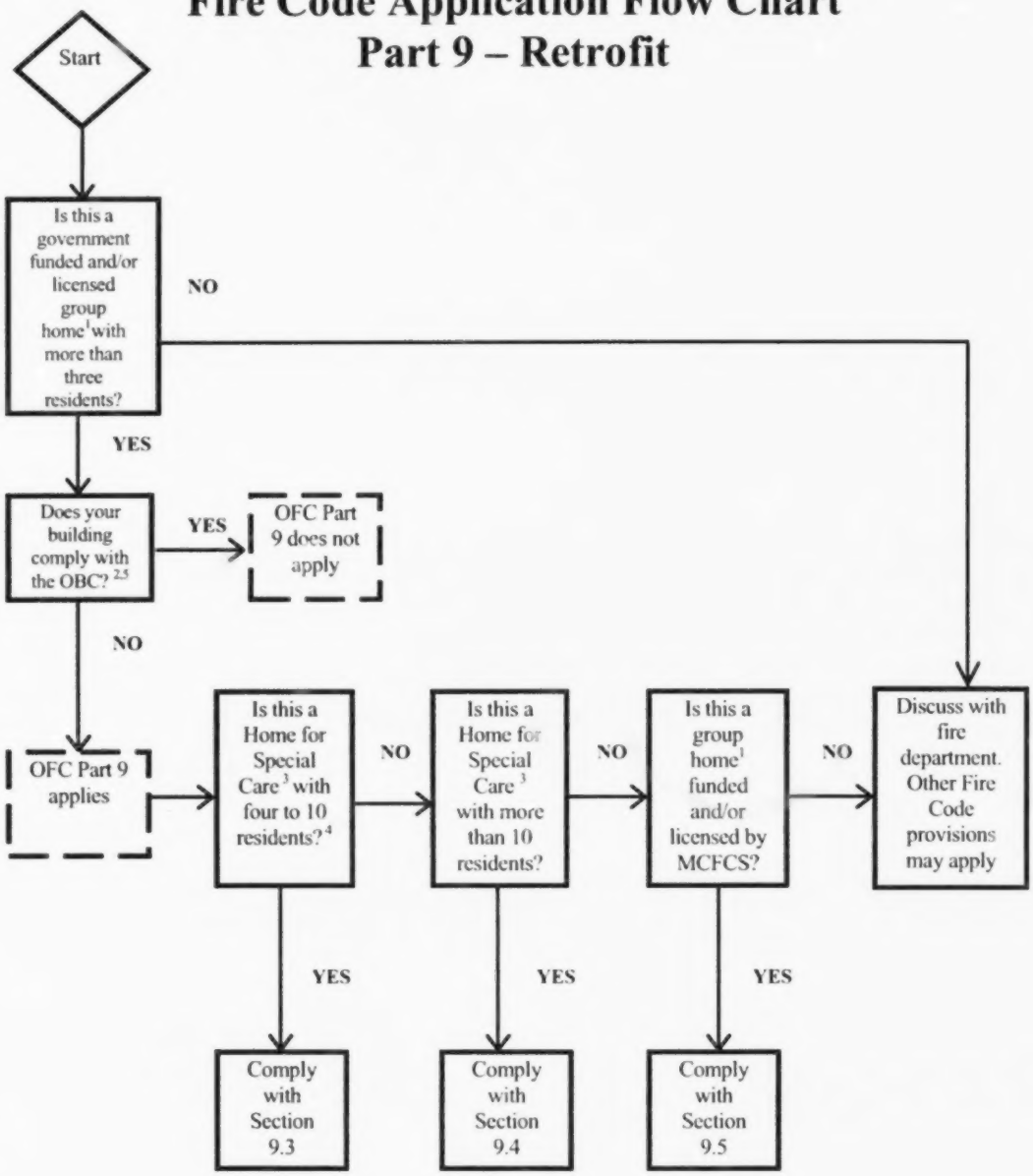
Life Safety Study (LSS)

A LSS is a proposal submitted to the fire department that identifies alternate methods of meeting the requirements of Part 9 of the OFC and which achieve a similar level of life safety. A professional engineer or architect must prepare the LSS as described in the Subsection 9.1.4. of the OFC. In the event that the LSS is not approved by the fire department, the owner is afforded the rights of appeal in the same manner as though it were an Inspection Order. Additional information on preparing a LSS is attached as Appendix B.

2.4.2 Inspection Orders

While not normally used in situations involving a violation of the OFC, an Inspection Order may be issued where the OFC allows for discretionary approvals and the fire department wishes to afford an owner the right of appeal. An appeal to the Fire Marshal must be filed within the time periods prescribed in the *Fire Protection and Prevention Act, 1997*. The Act also allows for a second level of appeal to the Fire Safety Commission (FSC) and a subsequent level of appeal to the Superior Court of Justice.

GROUP HOMES
Fire Code Application Flow Chart
Part 9 – Retrofit


Start
Is this a government funded and/or licensed group home[1] with more than three residents?
NO
YES
Does your building comply with the OBC? [2,5]
YES
OFC Part 9 does not apply
NO
OFC Part 9 applies
Is this a Home for Special Care [3] with four to 10 residents? [4]
NO
Is this a Home for Special Care [3] with more than 10 residents?
NO
Is this a group home[1] funded and/or licensed by MCFCS?
NO
Discuss with fire department. Other Fire Code provisions may apply
YES
YES
YES
Comply with Section 9.3
Comply with Section 9.4
Comply with Section 9.5

Note 1: Group home within the context of this guideline. See Section 1.0 of this guideline.
Note 2: OBC means Ontario Building Code made under the *Building Code Act*.
Compliance with OBC for current or intended use must be demonstrated.
Note 3: Homes for Special Care under the *Homes for Special Care Act*.
Note 4: See Sentence 9.3.1.1.(2) for additional criteria.
Note 5: OBC change of use provisions may apply. See Section 2.4.1 of this guideline.

3.0 SPECIAL OR SUPERVISORY CARE

3.1 Overview

The OBC contains the following definition for care occupancy:

> **Care Occupancy** means an occupancy in which persons receive special or supervisory care because of cognitive or physical limitations but does not include a **dwelling unit**.

The phrase "special or supervisory care" is not defined in the OBC. The following commentary may be used to provide guidance on the intent of the code.

Special or Supervisory Care

Special or supervisory care relates to the care of residents who do not require chronic or convalescent medical or nursing care. Special or supervisory care involves responsibility for the safety of the resident while inside the building. This care might include daily tracking by the operator of the resident's functioning and whereabouts, making and reminding residents of appointments, the ability and readiness for intervention in the event of the resident experiencing a crisis, supervision in the areas of nutrition and medication, the provision of transient medical care, or assistance with evacuation in the event of a fire emergency.

It is important to note that the definition of care occupancy relates to persons with cognitive or physical limitations. Therefore, group homes in which residents receive special or supervisory care because of emotional and/or behavioural difficulties would not necessarily be classified as care occupancies unless the residents also have cognitive or physical limitations.

4.0 ASSISTANCE IN EVACUATION

4.1 Overview

Subject to meeting specific criteria, Article 3.1.2.5. of the OBC allows owners of Group B, Division 3 occupancies the option of meeting the requirements for Group C occupancies, with their related fire safety provisions. One criterion that must be met is that the facility must have not more than two occupants who require *assistance in evacuation* in case of an emergency. In addition, Sentence 9.5.3.1.(3) of the OFC makes reference to this criterion in respect of means of egress requirements for boarding, lodging and rooming accommodation.

The concept of *assistance in evacuation* is not defined in the OBC or OFC; however, the intent of this criterion is to address the safe and timely evacuation of residents and to allow responding fire fighters the ability to carry out their functions without undue risk to themselves or the residents. Occupancies, including boarding, lodging and rooming houses under the OFC and B3 occupancies under the OBC, to which the *assistance in evacuation* criterion is applicable, require additional fire safety provisions to ensure the safety of residents and fire fighters.

4.1.1 Who Requires Assistance to Evacuate?

In general, residents who may require assistance to evacuate could include individuals who:

- may be incapable of independent mobility
- may require assistance to use or access a mobility aid, e.g., transferring to and from a wheelchair or accessing a walker or cane;
- may be incapable of following directions under emergency conditions; and
- may be capable of self-evacuation, but not within set time frames considered necessary to provide for safe evacuation in an emergency situation.

In order to assess the degree to which these circumstances would apply to residents and, therefore, make a determination about the assistance required to evacuate, group home owners/ operators and/or regulatory officials should be able to evaluate residents' self-evacuation capability, as well as the degree to which group home staff can and will provide assistance.

4.1.2 Evacuation Capability Assessment

It is the responsibility of group home owners/operators to make available information about the number of residents who require or are expected to require assistance to evacuate so that a building official can determine the applicability of Article 3.1.2.5. of the OBC or a fire official can determine the applicability of Sentence 9.5.3.1.(3) of the OFC. One approach for assessing the evacuation capability of residents is through the application of National Fire Protection Association standard 101A (NFPA 101A). Under this approach, a scoring or rating methodology is applied to residents and staff in order to arrive at a determination about how timely and effectively residents could be evacuated under emergency conditions. Appendix C of this guideline provides a description of the methodology and associated worksheets which are used to make this determination.

In the context of making assessments about occupancy classification for the purpose of issuing building permits or to make decisions about change of use and the application of potential retrofit requirements, different factors may be used to make this determination under assumed emergency conditions, including:

- risk of resident resistance to evacuation;
- physical ability to evacuate;
- potential for impaired consciousness during evacuation;
- need for staff assistance to evacuate;
- ability to receive, comprehend and follow instruction during evacuation;

- waking responsiveness to fire alarms;
- vertical distance from sleeping rooms to floor levels with exits;
- residents' responsiveness to fire drills;
- staff capability/availability to assist in evacuation;
- fire safety planning and associated training; and
- fire department response time

Not all of these factors can be evaluated in the design stages of new construction. However, consideration of the factors should provide group home owners/operators, designers and code enforcement officials with some useful information for making assessments. Based on a detailed evaluation of many of these factors under NFPA 101A, a numerical rating for the level of evacuation capability is determined. These levels are classified as prompt, slow or impractical and are based on time required to evacuate a building in emergencies (the NFPA *101® Life Safety Code®* Handbook, 1997,[1] offers a translation of fire drill times to evacuation capability for consideration). It should be noted that the NFPA 101A methodology and the principles upon which it is based illustrate one potential approach for making informed assessments of evacuation capability. This and other similar assessment tools or processes for determining resident evacuation capabilities are subject to the approval of code enforcement officials.

4.1.3 Declarations About Evacuation Capability

In recognition of changing circumstances (staffing complement, number and/or profile of residents), which are beyond the control of code enforcement officials, it is advised that the group home owner/operator file a declaration which attests to the circumstances upon which a building permit or change of use is requested. Where applicable, the declaration would form part of the building permit application or change of use request. The declaration by the owner should specify the expected number and profile of residents, including evacuation capabilities.

Group home owners/operators are obligated, by law, to comply with the OBC and OFC requirements, including applying for change of use permits or undertaking retrofit when the circumstances of their residents change in such a way that their original classification no longer remains valid. It is the responsibility of group home owners/operators to provide accurate and timely information through means such as a declaration in order to ensure that their facilities adequately meet required fire safety standards.

Changes to circumstances related to evacuation capability can be assessed through fire safety planning, regular fire drills, staffing level projections and group home operational plans. It is also important to consider the nature of changed circumstances which may apply to residents. OBC Article 3.1.2.5. and the OFC Sentence 9.5.3.1.(3) criteria related to evacuation capability are intended to apply in cases of long-term or permanent conditions which affect evacuation during emergencies. They are not intended to apply to residents who may have short-term or transitory conditions affecting their need for assistance to evacuate.

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[1] *Life Safety Code®* and *101®* are registered trademarks of the National Fire Protection Association, Inc., Quincy, MA 02269

5.0 DWELLING UNIT/SINGLE HOUSEKEEPING UNIT

5.1 Overview

The OBC contains the following definition for care occupancy and related terms:

> **Care Occupancy** means an occupancy in which persons receive special or supervisory care because of cognitive or physical limitations but does not include a **dwelling unit**.
>
> **Dwelling unit** means a **suite** operated as a housekeeping unit, used or intended to be used as a domicile by 1 or more persons and usually containing cooking, eating, living, sleeping or sanitary facilities.
>
> **Suite** means a single room or series of rooms of complementary use, operated under a single tenancy, and includes **dwelling units**, individual guest rooms in motels, hotels, boarding houses, rooming houses and dormitories as well as individual stores and individual or complementary rooms for **business and personal services occupancies**.

The exclusion of dwelling units in the definition of care occupancy is intended to apply to situations in which individuals in their own homes independently contract for the provision of care or, in other words, where residency is not contingent on receiving care. Group homes in which residency is contingent upon receiving or providing care, do not fall within this exemption. However, with reference to the OBC flow chart following Section 2.3.2 of this guideline, group homes with not more than 10 residents who are living as a single housekeeping unit, with not more than two who require assistance to evacuate, benefit from relaxed requirements in that the homes need only meet the standards for a dwelling unit.

The term "single housekeeping unit" (or "housekeeping unit") is referred to in the OBC definition of "dwelling unit" and in the OBC's exemption from care occupancy (B3) requirements in Article 3.1.2.5.. The term "housekeeping unit," however, is not defined in the OBC, or in the OFC. Uncertainty around the definition of "housekeeping unit" has, in some cases, resulted in inconsistent application of the OBC and the OFC to group homes. This commentary is meant to provide guidance on the terms "housekeeping unit" and "dwelling unit" as they relate to the classification of group homes under the OBC.

As defined in the OBC, a "dwelling unit" must have all the following attributes:

(i) a single room or series of rooms of complementary use, operated under a single tenancy (i.e., a "suite") usually containing cooking, eating, living, sleeping and sanitary facilities;

(ii) used or intended to be used as a domicile by one or more persons; and

(iii) operated as a housekeeping unit.

The first attribute ("single tenancy") addresses the issue of tenure and the complementary nature of the use of the rooms in the premises. It may be signalled by objective indicators (e.g. lack of locks on internal doors). Occupants of a premises which is operated under "a single tenancy" are generally precluded from establishing exclusive possession of any part of the premises.

The second attribute ("domicile") may also be signalled by objective indicators (e.g. it is a place of residence and there is some permanence of occupation). This attribute adds to the definition by addressing the residential use and the permanence of occupation.

The common meaning of the third attribute ("housekeeping unit") relates to communal performance or involvement in household tasks or affairs. Its inclusion in the OBC reinforces the requirement that the occupants live communally.

6.0 DESIGN CONSIDERATIONS

6.1 Overview

Whether it involves the construction of a new building or the renovation or retrofit of an existing building, the design of a group home, particularly those deemed to fall within the scope of the boarding, lodging or rooming house provisions of the OBC or OFC, requires the consideration of many factors. A major design challenge is to meet the operational and program needs in a setting that provides for the safety of the residents and yet maintains a traditional home like environment. Implementation of some of the specific requirements in the OBC and OFC, and in particular those related to containment and egress, have been identified as a major concern for group home owners/operators in meeting this challenge. The focus of the following is to provide some general design considerations for owners/operators in the evaluation of methods by which to comply with the various code requirements in view of operational and program needs. Code enforcement officials should be consulted with respect to the applicability of specific code concessions.

6.1.1 Containment

The primary objective of the containment provisions of the codes is to limit the size and spread of fire and smoke through a building. This is typically achieved in a group home setting by requiring the fire separation of storeys, individual sleeping rooms, exits and certain service rooms.

Most fire separation requirements can be met by conventional construction approaches and rarely present any compliance difficulties.

Considerations

- *Special fire rated (Type 'X') gypsum wall board will usually be required for newly constructed walls or ceilings;*
- *In renovation or retrofit projects, existing gypsum wallboard or lath and plaster finishes may be acceptable;*
- *Finishes such as wood panelling installed directly onto studs with no gypsum wallboard base are usually not acceptable in a fire separation;*
- *Suspended acoustic tile ceilings are usually not acceptable in a fire separation;*
- *In renovation or retrofit projects, the installation of an automatic sprinkler system allows for most existing wall and ceiling finishes to remain as originally installed. Existing doors are, in most cases, also acceptable as originally installed.*

A significant operational issue raised in the implementation of the containment provisions of the codes is the need for self-closing devices on doors in fire separations. Self-closing devices are essential in ensuring that fire rated doors are kept from being accidentally left open, thereby allowing the spread of fire and smoke.

Considerations

- *In retrofit projects, self-closing devices are not usually required on bedroom doors unless they are located in a dead-end corridor (one direction of travel to reach an exit) and more than two residents in the home require assistance in evacuation. They are also required when bedrooms open directly onto exit stairways;*
- *Security and operational issues associated with doors being kept in the closed position because of self-closing devices may be dealt with through the use of electromagnetic hold-open devices. These devices are designed to keep the door in the open position until a signal is received from a smoke detector, sprinkler system and/or the building fire alarm system. In retrofit or renovation applications code officials may, in the absence of a building fire alarm system, allow the device to be released from an interconnected smoke alarm system or from a smoke alarm integrated into the device;*
- *Spring hinges are an acceptable alternative where aesthetic or security needs preclude the presence of a standard self-closing device.*

6.1.2 Egress

The primary objective of the egress provisions in the codes is to provide for an adequate number of suitable exits for the residents and to ensure that the paths of travel to the exits are adequately protected from fire.

The exit and access to exit provisions are identified by operators as a major obstacle for compliance with the codes. This is particularly valid for existing group homes that are required to install walls etc, to meet the change of use provisions of the OBC or the retrofit provisions of the OFC.

Considerations

- *Typically, a single exit from each floor level that leads to the exterior will be acceptable in a conventional two-storey group home. However, two exits from each floor level where there is sleeping accommodation is desirable as residents will have a choice of exit in the event one is not accessible. This arrangement will also avoid having to meet stricter requirements as a result of having a dead-end corridor situation;*
- *Examples of egress arrangements for two-storey group homes acceptable under Section 9.5 of the OFC are shown in Appendix D;*
- *Single-storey or bungalow type homes with a front and rear or side entrance allow for easier compliance with egress requirements. However, consideration must still be given to the fire protection of the corridor between the two exits;*
- *Protection of the corridor access to exit will usually require the installation of fire rated doors complete with self-closing and latching devices at openings to the kitchen, living/ dining rooms and other rooms, which open onto the corridor. Operational and program needs for these doors to be kept open may be addressed through the use of hold-open devices as described in the preceding section;*
- *Code enforcement officials may, within the framework of the applicable code, have discretion to approve alternative egress arrangements.*

Appendix A

The following are answers to common questions received by the Office of the Fire Marshal (OFM) and the Building and Development Branch (BDB) of the Ministry of Municipal Affairs and Housing in connection with the application of the OBC and OFC to group homes.

ONTARIO BUILDING CODE AND ONTARIO FIRE CODE APPLICATION TO GROUP HOMES

Q1

I completed the construction of my group home in 2001. I obtained the necessary building permit and have passed all inspections. Do I still need to comply with Part 9 of the OFC?

A1

No. Part 9 of the OFC does not apply to buildings that were constructed in accordance with and continue to comply with the OBC for the intended use including observance of original design parameters and declarations (see Section 4.1.3 of this guideline).

Q2

I constructed my group home in 1992. I obtained the necessary building permit and passed all inspections. Do I still need to comply with Part 9 of the OFC?

A2

Possibly. Part 9 of the OFC would not apply to your home if it was constructed specifically as a group home and continues to comply with the OBC, as it existed at the time. However, if the home was not declared to be a group home at the time of building permit application, it may have been inappropriately constructed under the OBC as a dwelling unit. In this case, Part 9 of the OFC may apply. You should consult with the local fire department to determine if compliance with Part 9 of the OFC is required.

Q3

As a follow-up to the above, I consulted with the building department and was advised that the home was appropriately classified as a dwelling unit at the time of construction and I am not subject to the change of use provisions in Part 10 of the OBC. The fire department still has some concerns about this classification and wants me to comply with Part 9 of the OFC. What should I do?

A3

A copy of this guideline has been made available to all building and fire departments with the intent of achieving consistency in application of the OBC and OFC. It is expected that the building and fire department officials will utilize the information described in this guideline to determine whether or not the building was and continues to be appropriately classified.

Q4

I operate a group home for three residents all of whom have significant physical and developmental disabilities. The home is licensed/regulated by MCFCS. Do I need to comply with the OBC or OFC?

A4

The home is not subject to Part 9 of the OFC as lodging is provided for no more than three residents. However, depending on when the home became a group home, it may be subject to the change of use provisions of the OBC. See Q5.

Q5

I have been operating a group home as a boarding, lodging and rooming house since 1997. Prior to 1997, the home was a dwelling unit. I did not consult with the building department when I purchased the property for the intended use. Do I need to apply for a change of use permit under the OBC?

A5

Yes, as of July 1, 1993, the change of use requirements apply to all buildings that had a change in use. Buildings that are not in compliance with the OBC would also be subject to compliance with Part 9 of the OFC (See Section 2.4.1 of this guideline).

Q6

I plan to convert an existing dwelling unit into a group home that will most likely qualify to be considered a Group C major occupancy under Article 3.1.2.5. of the OBC. Do I still need a change of use permit?

A6

Yes since a change of use will take place. To benefit from the provisions under Article 3.1.2.5. of the OBC, you will need to have the necessary documentation to justify the Group C classification. See Section 4.0 of this guideline and related questions below.

Q7

I have recently obtained a building permit for renovations to my group home and made the necessary changes to comply with the OBC. Will I need to make further changes to comply with Part 9 of the OFC?

A7

It is expected that any changes necessary to comply with the OBC will result in a higher life safety standard than required under Part 9 of the OFC. In fact, the change of use and renovation provisions in Parts 10 and 11 of the OBC respectively are predicated on the assumption that the minimum standards in Part 9 of the OFC have already been met. Contact the fire department if you are not sure if your home complies with Part 9 of the OFC.

Q8

I have recently complied with Part 9 of the OFC. Do I still need a change of use permit to comply with the OBC?

A8

A change of use permit is required in the following instances:

Case 1 – If the use changed from a dwelling unit to boarding, lodging and rooming after July 1, 1993; and

Case 2 – If the use changed from a residential occupancy (dwelling unit or boarding, lodging and rooming) to a care occupancy after April 6, 1998.

Q9

I have recently renovated my group home under Part 11 of the OBC. Do I still need to comply with Part 9 of the OFC?

A9

The change of use and renovation provisions in Parts 10 and 11 of the OBC respectively are predicated on the assumption that the minimum standards in Part 9 of the OFC have already been met. It is expected that any changes necessary to comply with the OBC will result in a higher life safety standard than required under Part 9 of the OFC. Contact the fire department if you are not sure if your home complies with Part 9 of the OFC.

Q10

If I do not agree with the building and/or fire department's classification and/or treatment of my building under the codes, what avenues of appeal do I have?

A10

If the dispute is in connection with the issuance of a building permit for compliance with the OBC, or an order issued under the *Building Code Act, 1992*, an application may be made to the Building Code Commission (BCC). The BCC has the authority to consider issues involving both the interpretation of and sufficiency of compliance with the technical requirements of the OBC.

If the dispute relates to compliance with the OFC, there is no formal mechanism for appeal other than through the courts. In some circumstances, the fire department may issue an Inspection Order where the OFC allows for discretionary alternatives to compliance with the prescriptive requirements of the OFC and the fire department wishes to afford an owner the right of appeal. An appeal to the Fire Marshal must be filed within the time periods prescribed in the *Fire Protection and Prevention Act, 1997*. The Act also allows for a second level of appeal to the Fire Safety Commission (FSC) and a subsequent level of appeal to the Superior Court of Justice. See also Q24 for appeal rights associated with the submission of a Life Safety Study.

Independent legal or professional advice may be appropriate whenever legal action is contemplated.

SPECIAL OR SUPERVISORY CARE

Q11

The definition of care occupancy and the commentary on special or supervisory care in Section 3.1 of the guideline is very broad. I plan to purchase an existing home and convert it to a group home. The home will be a group home under the *Child and Family Services Act* and will have five children all of whom are ambulatory but who will also require supervision in the areas of nutrition and medication. Does this automatically make me a care occupancy?

A11

Yes, by definition. However, with reference to the OBC flow chart on page 9, because you have not more than 10 residents and not more than 2 residents who require assistance to evacuate, you may choose to be treated as a Group C occupancy and only meet the standards for a dwelling unit. It is important that a declaration with regard to the nature of the use and the evacuation needs of the residents be made to the building department at the time of permit application (See Section 4.0 of this guideline).

Note that any changes in circumstances over time which deviate from the information in the declaration, particularly in relation to the degree residents require assistance in evacuation, must also be declared to the building department as a different classification may apply (See Section 2.2 of this guideline).

Q12

I operate a group home that provides special or supervisory care to residents with emotional and/or behavioural difficulties but with no cognitive or physical limitations. Is the home still considered to be a "care occupancy"?

A12

No. However, the home may be classified as a boarding, lodging and rooming house under the codes and therefore have to meet a number of requirements under either the OBC or OFC depending on when the home was originally occupied. Refer to Sections 2.2 and 2.3 of this guideline, and consult with code enforcement officials to determine the specific application.

Q13

What about situations where a group home is not regulated by the Ministry of Community, Family and Children's Services (MCFCS)?

A13

Group home owners/operators are required to comply with the OBC and/or OFC regardless of their regulatory status with MCFCS. Refer to Sections 2.3 and 2.4 of this guideline, and consult with code enforcement officials to determine the specific application.

Q14

How should a code enforcement official deal with situations where the owner/operator has not provided information about a change in resident numbers and profiles and/or staffing ratios?

A14

Building and fire officials have powers under their respective statutes to take action against group home owners/operators who do not comply with applicable code requirements.

Q15

What happens if there is little or no information known about resident profiles or staffing plans at time of permit application?

A15

Building officials should not issue permits unless they are provided sufficient information to determine compliance with the OBC.

ASSISTANCE IN EVACUATION

Q16

Do the NFPA 101A worksheets have to be prepared by a professional engineer or architect?

A16

No, it is not an expectation that the worksheets be prepared by a professional. In fact, it is expected that the worksheets be completed by the owner/operator who is most familiar with resident capabilities and has ultimate responsibility for compliance with the codes. It is also important that you first confirm with the building and/or fire department that they are prepared to consider the worksheets as a basis for establishing evacuation capability.

Q17

Using the NFPA 101A worksheets, I have arrived at an evacuation capability level of "slow". Does this mean that my home is considered to have more than two occupants requiring assistance in evacuation in case of emergency?

A17

Yes. It is expected that homes for which NFPA 101A worksheet evaluations arrive at an evacuation capability of "slow" or "impractical" be considered to have more than two persons requiring assistance in evacuation in reference to Article 3.1.2.5. of the OBC and Sentence 9.5.3.1.(3) of the OFC.

Q18

I do not wish to use the NFPA 101A worksheets to determine evacuation capability. Can I use another tool or method for this purpose e.g. a program of fire drills?

A18

Yes. The NFPA 101A worksheets illustrate only one approach for making informed decisions about evacuation capability. The NFPA *101 Life Safety Code* Handbook, 1997, suggests a program of timed fire drills to establish evacuation capability. The handbook suggests a translation of drill times to evacuation capability as follows:
3 min. or less – prompt;
over 3 min. but not in excess of 13 min. – slow; and
more than 13 min. – impractical.
This approach may be appropriate for an existing home and should be discussed with code enforcement officials in the context of the related discussion in the *Life Safety Code* Handbook.

Q19

The resident profile in my home has changed since the time of my original permit application. I now have more than two persons requiring assistance in evacuation in case of an emergency. What are my obligations?

A19

As the owner/operator, you have a legal obligation to declare the change to the building department as a different classification may now apply. Notwithstanding this obligation, fire officials during the course of their duty may inspect and where deemed necessary, conduct drills to determine evacuation capabilities. Should they determine that circumstances have changed from the original declaration, they will likely invoke their statutory authority to seek compliance.

Q20

The resident profile in my group home is expected to change on a frequent basis. Am I expected to reassess the evacuation capability for each new placement?

A20

If the resident profile is expected to change on a frequent basis, it would be prudent to design the home based on the greatest expected risk in which case reassessment would not be necessary.

DWELLING UNIT/SINGLE HOUSEKEEPING UNIT

Q21

I operate a group home in which the residents essentially live as a single housekeeping unit. I have been notified by the fire department that I need to retrofit my home to meet with Section 9.5 of the OFC. Is this correct?

A21

If your home serves more than three residents and is licensed and/or regulated by MCFCS, it is required to be in compliance with Section 9.5. However, Part 9 of the OFC is not applicable if the home already complies with the OBC. Because Section 9.5 of the OFC has no direct exemption for group homes operated as dwelling units/single housekeeping units, you will need to either obtain confirmation from the building department or demonstrate to the fire department that your home would be considered as such under the OBC. Refer to Sections 2.2, 2.3 and 2.4 of this guideline, and consult with code enforcement officials to determine the specific application.

Q22

I plan to open a licensed group home which will likely have a number of residents with cognitive and physical disabilities. It seems clear that the home will be considered a care occupancy and will not benefit from the relaxation in Article 3.1.2.5. In this circumstance, will I then need to meet the boarding, lodging or rooming provisions of the OBC?

A22

No. Your home will need to meet the care occupancy (Group B, Division 3) provisions.

Q23

Do locks on the main entrance, bedroom or furnace room doors automatically exclude a group home from being considered a dwelling unit for the purposes of Article 3.1.2.5.?

A23

No. Locks on doors are just one indicator to be considered in evaluating the home against the definition of dwelling unit and the associated attributes discussed in Section 5.0 of this guideline. Note that locks on any doors that restrict egress in the event of an emergency by requiring keys, special devices or specialized knowledge are generally not permitted under the OBC and OFC. Exceptions are provided for spaces specifically designed as *contained use areas* or *impeded egress zones* as defined in the OBC.

OTHER

Q24

What is a Life Safety Study (LSS)?

A24

A LSS is a proposal submitted to the fire department that identifies alternate methods of meeting the requirements of Part 9 of the OFC. A professional engineer or architect must prepare the LSS as described in the Subsection 9.1.4. of the OFC. In the event that the LSS is not approved by the fire department, the owner is afforded the rights of appeal in the same manner as though it were an Inspection Order. Additional information on preparing a LSS may be found in Appendix B. See also Q10.

Q25

What is the role of the Office of the Fire Marshal (OFM) and the Building and Development Branch (BDB) in relation to enforcement of the OFC and OBC respectively?

A25

The OFM and BDB are provincial agencies responsible for the development and administration of the OFC and OBC respectively. They do not enforce the codes as this role is carried out at the local level by municipal fire and building departments (see Section 2.1 of this guideline). The OFM and BDB also provide opinions on the application of the respective codes. These opinions are provided to municipal officials, consultants and the public. Detailed information on the role of these agencies and access to various publications and past opinions may be obtained from their individual websites as follows:

OFM - www.jus.gov.on.ca/OFM

BDB – http://obc.mah.gov.on.ca/

Appendix B

Preparing a Life Safety Study

Summary for Property Owners

What is a Life Safety Study?

A Life Safety Study is a proposal submitted to the *Chief Fire Official* that identifies alternate methods of meeting the retrofit requirements under Part 9 of the Ontario Fire Code.

When should a Life Safety Study be prepared?

A Life Safety Study may be prepared if an *owner* considers that a particular retrofit requirement is not feasible and that alternate fire protection measures will achieve an acceptable level of life safety.

Who should prepare the Life Safety Study?

This study must be prepared by an Architect and/or Professional Engineer. Architect means a licensee of the Ontario Association of Architects under the *Architects Act*. Professional Engineer means a licensee of the Professional Engineers of Ontario under the *Professional Engineers Act*.

What is included in a Life Safety Study?

The proposal must be prepared in accordance with Subsection 9.1.4. of the OFC and include:

1. a list of the items that do not comply with the retrofit regulations;
2. how an acceptable level of life safety as envisioned in the OFC may be achieved;
3. a detailed timetable for implementing the proposal; and,
4. interim measures that will be established for life safety, if appropriate.

What are some common errors found in Life Safety Studies?

There are a number of misconceptions over what constitutes a Life Safety Study. For example, some owners, or their consultants, have submitted only a list of building deficiencies. Others have tried to explain why it is unnecessary to correct a particular deficiency as required by the retrofit regulations. In some instances, a lengthy schedule of compliance was submitted without any interim measures proposed. In each of these cases, the applicant had to provide additional information before the proposal could be processed.

Example of an Issue Covered by a Life Safety Study:

A Life Safety Study was submitted for a single storey (plus basement) group home of combustible construction which was required to be in compliance with Section 9.5 of the OFC. The home contained four bedrooms on the main floor and one in the basement. A recreation room was also located in the basement. There were two ramped exits from the main floor and a single dedicated exit from the basement. Interconnected smoke alarms were in place in each bedroom and in the main floor hallway, basement hallway, basement office and furnace room. Five residents all reported to require assistance in evacuation occupied the home. The residents were continually supervised while in the home by two staff during the day and one overnight.

The corridor access to exit provisions in Section 9.5 requiring the fire separation of the living room and kitchen on the main floor and the recreation room in the basement were identified as major impediments to program and functional needs. The LSS proposed that the following enhancements be considered to provide an acceptable level of safety in lieu of meeting the corridor access to exit provisions:

1. installation of an automatic sprinkler system in accordance with NFPA 13R;
2. installation of a carbon dioxide suppression system above the kitchen range;
3. installation of 20 minute rated doors complete with self-closing and latching devices across all bedroom doorways;
4. installation of a 20 minute rated door complete with self-closing and latching device at the top of the basement stairway; and
5. replacement of existing combustible wall coverings in the corridor access to exits.

The LSS proposed implementation of the above items within six months of the written approval of the Chief Fire Official.

The proposal, with further allowances for the existing bedroom doors and combustible finishes in corridor access to exits, was approved in this particular case. The additional fire protection features, in conjunction with existing features, were considered to provide an acceptable level of life safety for occupants of this building.

Appendix C

NFPA 101A – *Alternative Approaches to Life Safety*
Chapter 6 – Evacuation Capability Determination for Board and Care Occupancies

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Chapter 6 Evacuation Capability Determination for Board and Care Occupancies

6.1 General.

6.1.1

This chapter is part of an NFPA guide and therefore is not mandatory. The term *shall* in this chapter is used to indicate that if the provisions of the chapter are applied, the procedures mandated are to be followed to ensure the effectiveness of the system. For ease of reading, only the masculine pronoun is used; however, the contents of this chapter apply equally to females and males.

6.1.2

Chapters 32 and 33 (NFPA *101*) specify three sets of requirements for a facility based on its evacuation capability. The three levels of evacuation capability defined are *prompt*, *slow*, and *impractical*.

6.1.3

The evacuation capability shall be determined for the residents of a given facility who are living as a group and are provided with staff assistance prior to application of the fire protection requirements. This chapter describes one method for determining evacuation capability.

6.1.4

The evacuation capability for specific facilities, with residents living as a group with staff assistance, is determined by a mathematical method that includes the following:

(1) Determining the evacuation assistance scores of the individual residents

(2) Computing a relative level of evacuation difficulty faced by the resident of a specific facility based on the response capabilities of the staff

(3) Adjusting for vertical egress travel

(4) Calculating an evacuation capability score

6.1.5

Chapters 32 and 33 (NFPA *101*) define the three evacuation capability levels in terms of residents' performance in a timely response to an emergency evacuation with assistance from staff members or other residents. Utilization of this chapter provides a numerical score that can be translated into one of the three levels of evacuation capability.

6.1.6

The evacuation capability shall be permitted to be used with either Chapter 7 of this guide or Chapters 32 and 33 (NFPA *101*).

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6.2 Procedure for Determining Evacuation Capability.

6.2.1 Methodology.

Evacuation capability shall be determined via the worksheets included in Figure 6.8.

6.2.2 Evacuation Capability by Zones.

6.2.2.1

Small facilities (those with no more than 16 residents) shall have their evacuation capability scores based on all the residents and the available staff measured in accordance with the criteria for evaluating residents and staff in this chapter.

6.2.2.2

Large facilities (those with more than 16 residents) shall be permitted to have the evacuation capability score calculated on the basis of the entire building, as with small facilities, or on the basis of separate fire or smoke zones. The procedure providing the superior (i.e., lower) evacuation capability score shall be permitted to be used. A fire or smoke zone is a portion of the building separated from all other portions of the building by construction having at least 1-hour fire resistance or by a smoke barrier conforming to the requirements of Section 8.3 (NFPA *101*), with the smoke barriers constructed with at least a half-hour fire resistance rating.

Exception: In buildings protected throughout with an automatic sprinkler system, zoning of the facility shall be permitted to be by construction that is sound and smoke resistant.

6.2.3

If a building is zoned, each zone shall be evaluated separately. The evacuation capability score is based on the residents of that zone and the staff available to that zone in accordance with the staff rating criteria in this chapter.

6.2.4

Where using zones, a separate evacuation capability score shall be determined for zones that include common use spaces where the residents of more than one zone congregate for meals, recreation, or other purposes. In such cases, adjust the resident evacuation assistance scores as appropriate to reflect the different needs that residents might have under such conditions.

6.3 Rating Residents.

6.3.1

Worksheets 6.8.1 through 6.8.4 of Figure 6.8 are used for rating the individual resident and also for recordkeeping purposes.

6.3.2

This method of determining evacuation capability has been designed to minimize speculation about how a resident might perform in an actual fire emergency by using ratings based on observed performance. Instead of speculating, raters who are not familiar enough with a resident to provide ratings confidently should consult with an individual who has observed the resident on a daily basis.

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6.3.3

Due to the stress of an actual fire emergency, some residents are not likely to perform at full capacity. Therefore, ratings based on commonly observed examples of poor performance provide the best readily available indication of behavior that could be reduced by the unusually stressful conditions of an actual fire. All persons are less capable on some occasions, and the ratings should be based on examples of resident performance on a typical "bad" day. Ratings should not be based on rare instances of poor performance.

6.4 Rating Residents Using Worksheets 6.8.1 through 6.8.4.

6.4.1 Risk of Resistance (Line I of Worksheet 6.8.2).

6.4.1.1

Line I rates the risk that the resident might resist leaving the facility during an emergency evacuation. Unless there is specific evidence that resistance might occur, the resident should be rated as "minimal risk." If more than one rating applies, use the rating with the highest numerical score.

6.4.1.2

Specific evidence of resistance means that staff have had to use some physical force in the past. However, an episode of resistance should not be counted if it was the result of a situation that was different enough from an actual fire emergency that it probably does not predict behavior in such an emergency. For example, an incident in which a resident refuses to visit with parents probably does not predict behavior in an actual fire emergency and should not be counted as specific evidence. Resistance can be active (the resident might have struck a staff member or attempted to run away) or passive (the resident might have "gone limp" or hidden from staff members). Mere complaining or arguing is not considered resistance.

6.4.1.3 Minimal Risk.

This rating indicates that there is no specific evidence to suggest that the resident might resist an evacuation.

6.4.1.4 Risk of Mild Resistance.

This rating indicates that there is specific evidence that the resident might resist leaving the facility. Examples of specific evidence are as follows.

(a) The resident has mildly resisted instructions from staff. Further, the resistance was brief or easily overcome by one staff member and occurred in a situation similar enough to a fire emergency to predict that the behavior could recur during an actual fire emergency.

(b) The resident has hidden from the staff in a situation similar enough to a fire emergency to predict that the behavior could recur during an actual fire emergency. However, once found, the resident offered no further resistance.

6.4.1.5 Risk of Strong Resistance.

The resident might offer resistance that necessitates the full attention of one or more staff members. Examples of such specific evidence include the following:

(1) The resident has struggled vigorously in a situation similar enough to a fire emergency to predict that the behavior could recur during an actual fire emergency.

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(2) The resident has totally refused to cooperate in a situation that is similar enough to a fire emergency to predict that the behavior could recur during an actual fire emergency.

(3) The resident has hidden in a situation that is similar enough to a fire emergency to predict that the behavior could recur during an actual fire emergency. Moreover, once found, the resident continued to offer resistance.

6.4.2 Impaired Mobility (Line II of Worksheet 6.8.2).

6.4.2.1

Line II rates the physical ability of the resident to leave the facility. This rating should reflect the current physical environment in the building where the resident lives and should be based on the resident's lying awake on his bed. The resident is rated according to how easily he can leave, given the presence of factors such as physical barriers that hinder movement (e.g., stairs), the resident's ability to get out of bed, or the chairs normally used. The resident should be given credit for being able to use devices that aid movement (e.g., wheelchairs, walkers, crutches, and leg braces). However, the rater shall be permitted to give credit for such devices only if the devices are always available for an emergency evacuation.

6.4.2.1.1

The resident should be rated on his ability to use the most accessible route out of the facility. For example, a resident who is "self-starting" when using the back door but who "needs limited assistance" to get out the front door would be rated as "self-starting."

6.4.2.1.2

The resident should be rated for performance while under the influence of any routine medication that slows movement.

6.4.2.1.3

Where the resident needs physical assistance to make a timely evacuation, the rating of assistance needed is based on the degree of strength used by the staff member to assist the resident. Guiding or directing the resident by giving gentle pushes or leading by the hand is not considered physical assistance. If more than one rating applies, use the rating with the highest numerical score.

6.4.2.1.4 Self-Starting.

The resident is physically able to start and complete an evacuation without physical assistance.

6.4.2.1.5 Slow.

The resident prepares to leave and travels to the exit (or an area of refuge) at a speed significantly slower than normal. Specifically, the resident is rated "slow" if not able to prepare to leave and then travel from his sleeping room to the exit (or area of refuge) within 90 seconds.

6.4.2.1.6 Needs Limited Assistance.

The resident might need some initial or brief intermittent assistance but can accomplish most of the evacuation without assistance. An example of specific evidence is that the resident is physically able to start and complete an evacuation, except under the following conditions:

(1) The resident needs help to get into a wheelchair.

(2) The resident needs help to descend stairs.

(3) The resident needs help to get out of bed.

(4) The resident needs help to open a door.

6.4.2.1.7 Needs Full Assistance or Very Slow.

The resident needs "full assistance" or is "very slow" as defined in 6.4.2.1.7.1 and 6.4.2.1.7.2.

6.4.2.1.7.1 Needs Full Assistance.

The resident either needs physical assistance from a staff member during most of the evacuation or must be assisted by staff in one of the following ways:

(1) Carried from the facility

(2) Helped into a wheelchair and wheeled out of the facility

(3) Helped into leg braces and to descend the stairs

6.4.2.1.7.2 Very Slow.

The resident is very slow if the time necessary to prepare to leave and then travel from his sleeping room to the exit is so long that the staff usually assists the resident to evacuate. Specifically, the resident is rated very slow if unable to prepare to leave and then travel to the exit (or area of refuge) within 150 seconds.

6.4.3 Impaired Consciousness (Line III of Worksheet 6.8.2).

6.4.3.1

Line III rates the risk that a resident could experience a partial or total loss of consciousness in a fire emergency. Unless there is specific evidence that loss of consciousness might occur during a fire emergency, the resident should be rated as "no significant risk."

6.4.3.2

Specific evidence is an indication that the resident has experienced some temporary impairment of consciousness of short duration (seconds or minutes) six or more times during the three months preceding the rating of the resident. Regardless of frequency, if there is specific evidence that loss of consciousness might be caused by the stress of a fire emergency, the resident should be rated as having impaired consciousness. An episode of partial loss of consciousness should be counted only if the impairment was severe enough to significantly interfere with the resident's ability to leave the facility. Do not count episodes where the loss of consciousness was the result of a temporary medical problem (e.g., a severe infection). If more than one rating applies, use the rating with the highest numerical score.

6.4.3.3 No Significant Risk.

The resident is not subject to loss of consciousness, or the resident has had fewer than six episodes of losing consciousness (partial and total) during the three months preceding the rating.

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6.4.3.4 Partially Impaired.

The resident has had at least six episodes of losing consciousness in the preceding three months, and the most severe of these episodes was only a partial loss of consciousness; that is, the resident still is able to participate in an evacuation to some degree. Specific evidence that a resident should be rated in this category includes loss of consciousness resulting from mild (partial or petit mal) seizures, dizzy spells, intoxication, or any other partially incapacitating impairment of consciousness.

6.4.3.5 Totally Impaired.

The resident has had at least six episodes of losing consciousness in the preceding three months, and the most severe of these episodes was total or severely incapacitating loss of consciousness; that is, the resident needs the full assistance of at least one staff member to get out of the building. Specific evidence that a resident should be rated in this category includes losses of consciousness resulting from severe (generalized or grand mal) seizures, fainting spells, intoxication, or other total or severely incapacitating loss of consciousness.

6.4.4 Need for Extra Help (Line IV of Worksheet 6.8.2).

6.4.4.1

Line IV rates the possibility that more than one staff member might be needed to evacuate the resident. Specific evidence is a previous need for two or more persons to assist the resident and an indication that the resident could need assistance from two persons in a fire emergency.

6.4.4.2

Where determining the need for additional assistance, the evaluator should disregard the physical strength or weakness of staff members. (For example, a large staff member who is exceptionally strong might be able to assist a resident alone, while a smaller staff member might be unable to assist the resident fully. However, there is no assurance that a staff member who is able to assist alone always will be able to respond to a resident requiring extra assistance.)

6.4.4.3 Needs at Most One Staff Member.

There is no specific evidence that the resident might need help from two or more persons in a fire emergency.

6.4.4.4 Needs Limited Assistance from Two Staff Members.

The resident might need some initial or brief intermittent assistance from two staff members, but otherwise needs help from no more than one. Specific evidence is that a resident needs assistance from no more than one person except in the following cases:

(1) The resident needs assistance from two persons to get into a wheelchair.

(2) The resident needs assistance from two persons to descend stairs.

6.4.4.5 Needs Full Assistance from Two Staff Members.

The resident might need assistance from two staff members during most of an evacuation. Specific evidence of the need for assistance from two staff members follows:

(1) Two persons are needed to carry the resident from the facility.

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(2) Two persons are needed to get the resident into a wheelchair and to get the wheelchair down a flight of stairs.

(3) The resident might resist an evacuation vigorously, and two persons are needed to get the resident out of the facility.

6.4.5 Response to Instructions (Line V of Worksheet 6.8.2).

6.4.5.1

Line V rates the resident's ability to receive, comprehend, and follow through with simple instructions during a staff-directed evacuation. Residents often do not respond equally well to all staff members; therefore, a resident should be rated on his responses to staff members whose directions he is least likely to follow. If more than one rating applies, use the rating with the highest numerical score.

6.4.5.2 Follows Instructions.

The resident usually can be depended on to receive, comprehend, remember, and follow simple instructions.

6.4.5.3 Requires Supervision.

The resident generally is capable of following instruction but is not dependable. Therefore, the resident might need to be guided, reminded, reassured, or otherwise accompanied during evacuation but does not require the exclusive attention of a staff member (e.g., a staff member can lead two or more residents who fit this classification simultaneously).

6.4.5.3.1

This category includes elderly persons who sometimes show early signs of senile dementia or Alzheimer's disease (e.g., confusion, disorientation, frequent "misplacement" of possessions) and young children who cannot be depended on to follow through with instructions.

6.4.5.3.2

Residents in this category generally are capable of following instructions except in one of the following situations:

(1) The resident is deaf or hearing impaired and sometimes misinterprets communications from staff using sign language.

(2) The resident sometimes forgets instructions after a brief period of time.

(3) The resident is sometimes distracted or confused and fails to follow through with instructions.

(4) The resident is sometimes groggy and might fail to listen carefully or follow through with instructions.

(5) The resident is sometimes uncooperative without apparent good reason.

(6) The resident is elderly and sometimes becomes "lost" in a familiar place.

(7) The resident is a young child who might become frightened and not follow through with instructions.

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6.4.5.4 Requires Considerable Attention or Might Not Respond.

6.4.5.4.1

The resident might fail to receive, understand, or follow through with instructions; that is, the resident might not respond to instructions or general guidance. Therefore, the resident might require most of the attention of a staff member during an evacuation.

6.4.5.4.2

This category includes elderly persons who have the symptoms of senile dementia or Alzheimer's disease (e.g., severe confusion, disorientation, very limited short-term memory).

6.4.5.4.3

Residents in this category might display one or more of the following characteristics:

(1) The resident sometimes does not understand simple instructions.

(2) The resident might not respond to instructions from a particular staff member.

(3) The resident is sometimes emotionally upset and is therefore unwilling to follow instructions.

(4) The resident is deaf or hearing impaired and the staff cannot communicate reliably with the resident.

(5) The resident is very forgetful, easily confused, or easily distracted.

6.4.6 Waking Response to Alarm (Line VI of Worksheet 6.8.2).

6.4.6.1

Line VI rates the risk that the fire alarm might fail to awaken the resident.

6.4.6.2

Residents should be rated as "response probable" unless any of the following conditions exists:

(1) The building does not have an alarm system meeting the requirements of Chapter 32 or 33 (NFPA *101*), as appropriate, or the alarm is not sufficiently loud where the resident sleeps (doors should be closed and barriers kept in place where determining the audibility of the fire alarm).

(2) Medication taken by the resident before retiring differs in type or amount (i.e., medication is increased) from the medication taken during waking hours.

(3) The resident has a readily apparent hearing impairment, or the resident's hearing aid is removed before sleeping.

(4) There is specific evidence that the resident is an exceptionally sound sleeper. Specific evidence is that the resident previously failed to be awakened by a particularly loud noise, and staff members have had to shake the resident vigorously to awaken him.

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6.4.6.3

Where any of the conditions in 6.4.6.2 exist, the resident should be rated as "response not probable" unless the resident's ability to wake up has been demonstrated. The demonstration of the resident's ability to wake up in response to the fire alarm should be conducted after the first half hour of sleep and during the first three hours of sleep. In addition, the resident's ability to wake up in response to the alarm should be demonstrated on two different nights under normal conditions (e.g., without hearing aid, under usual medications). Also, the resident should be alert enough to follow simple instructions within 1 minute after waking. To avoid waking other residents during demonstrations of the capability of a particular resident, a device that makes a sound that is similar to, but not louder than, the fire alarm shall be permitted to be used (e.g., an alarm clock or clock radio with a sound similar to the fire alarm).

6.4.6.4 Response Probable.

Either none of the conditions in 6.4.6.2 affect the resident, or, if any of the conditions exist, the resident's ability to be awakened has been demonstrated.

6.4.6.5 Response Not Probable.

One or more of the conditions in 6.4.6.2 affect the resident, and either the resident has not been tested for the ability to be awakened by the fire alarm or the resident has failed to demonstrate the ability to be awakened by the fire alarm.

6.4.7 Response to Fire Drills (Line VII of Worksheet 6.8.2).

6.4.7.1

Line VII rates the resident's ability to leave the facility during fire drills, as demonstrated by the resident's performance, without guidance or advice from the staff. A resident must demonstrate three separate responses reliably and without instructions or supervision in order to be rated "yes" in each case. The resident is rated "yes" only where the resident has been specifically trained or instructed in the desired reaction and has demonstrated the desired response in at least three of the last four fire drills in which a response was demonstrated. If the resident has not been involved in four fire drills, the rating shall be permitted to be "yes" only if the resident has demonstrated the desired response during the last two opportunities to demonstrate the response. Ratings are based on demonstrated performance, and any resident who has not been trained to participate in fire drills must be rated "no."

6.4.7.2

This rating covers the ability of the resident to make decisions but does not relate to mobility, which is covered separately. For example, a resident might need assistance only in transferring from a bed to a wheelchair but otherwise can initiate and complete an evacuation promptly. Such a resident would be rated "yes" for "Initiates and Completes Evacuation Promptly" but would be rated "Needs Limited Assistance," "Impaired Mobility" in Line II.

6.4.7.3

Residents should be rated assuming that an emergency could occur when they are least likely to respond well. For most residents, this is their response after being awakened. Determining the rating should not include difficulties in actually awakening the resident, since there are large differences in how easily the same individual awakens at various times.

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6.4.7.4 Initiates and Completes Evacuation Promptly.

The resident has demonstrated a proper response to an alarm or warning of a fire by starting and completing the evacuation without unnecessary delay. Specific evidence leading to a rating of "no" includes the following responses:

(1) The resident might not react to the alarm until alerted by a staff member.

(2) The resident spends an excessive amount of time preparing to leave (e.g., getting dressed, observing others).

(3) The resident has a hearing impairment and therefore needs to be alerted by a staff member.

(4) The resident is sometimes upset or confused and therefore might seek out a staff member before evacuating.

(5) The resident consistently begins an evacuation but is easily distracted and needs some supervision.

6.4.7.5 Chooses and Completes Backup Strategy.

The resident has demonstrated the ability to select an alternative means of escape or has taken other appropriate action if the primary escape route is blocked. Specific evidence leading to a rating of "no" is where the resident is unlikely to select a good course of action if the primary escape route cannot be used; that is, the resident has not been trained to find alternative escape routes, find an area of refuge, or perform other appropriate action(s). Where the resident lacks the conceptual ability to understand fire hazards and blocked escape routes, and therefore requires supervision, the rating should be "no."

6.4.7.6 Remains at Designated Location.

The resident must have demonstrated willingness to remain at a designated safe location during fire drills. (The whereabouts of already evacuated residents needs to be confirmed to avoid dangerous return trips to look for residents who might have returned to buildings.)

6.4.7.6.1

Specific evidence leading to a "yes" for this rating includes the following:

(1) The resident has been specifically trained to remain at a designated location in a safe area and has demonstrated this ability without the presence of staff members in three of the previous four fire drills.

(2) The resident is physically immobile and therefore cannot leave the designated location.

(3) The facility uses a motor vehicle (e.g., a van or bus) or a building that is detached and remote from the facility (i.e., another building or a remote garage) as the designated location, and the resident has demonstrated in three of the previous four fire drills the ability to remain there without the presence of a staff member.

(4) The resident might tend to wander, but a reliable resident has been assigned to keep the wandering resident at the designated location without using any force or coercion. Furthermore, this arrangement has been demonstrated as effective in at least three of the previous four fire drills.

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6.4.7.6.2

Specific evidence leading to a "no" for this rating includes the following:

(1) The resident has not been trained to remain at a designated location without any staff supervision.

(2) The resident has been trained to remain without staff supervision at a designated location but has failed to demonstrate this capability in three of the previous four fire drills.

6.5 Rating the Staff Shift (Worksheets 6.8.5 through 6.8.11).

6.5.1

This rating is intended to predict the promptness of response of a staff member who is present in the facility, at a given time (shift), and who is capable of assisting residents in an evacuation.

6.5.2

Before rating the staff shift, there are five basic requirements relative to the staff response capability, protection plans, and fire drills that shall be met. The determination of whether or not these requirements are met is recorded on Worksheet 6.8.8, Staff Shift Score. If the corresponding requirements of 6.5.2.1 through 6.5.2.5 have been met, a "yes" rating should be given.

6.5.2.1

A protection plan shall have been promulgated, and all staff members considered in this rating shall have been trained in its implementation. Regardless of the staff's everyday competencies, they cannot be relied upon to innovate effective life safety actions under the extreme stress and time limitation of an actual fire emergency. Notwithstanding the facility's fire protection features, the staff must have a valid and practiced plan of action that can be put into effect immediately in an emergency. The protection plan should include the following features:

(1) A description of all available evacuation, escape, and rescue routes and the procedures and techniques needed to evacuate all the residents using the various routes

(2) A fundamental knowledge of fire growth, containment, and extinguishment necessary to make reasonable judgments about action priorities and viable egress routes

6.5.2.2

The total available staff at any given time shall be able to handle the individual evacuation needs of each resident who might be in the facility. In calculating evacuation capability, it might be possible to have a ratio of staff to residents that appears to be favorable but that still is unacceptable under this system. This would be the case when a resident needs assistance from two staff members but only one staff member is present. Thus, the situation should be such that every resident can be evacuated by the available staff.

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Exception: The facility meets the criteria for an evacuation capability level of "impractical," the resident whose evacuation needs cannot be handled is in a sleeping room or other room that provides adequate refuge from fire outside the room, and there is at least one staff member present who can close the door to the room. For example, a very heavy resident is in a facility, meeting the criteria for impractical level of evacuation capability, with one available staff member who cannot transfer the resident from a bed to a wheelchair. Although the staff member is unable to meet all the resident's evacuation assistance needs, the sleeping room provides adequate refuge.

6.5.2.3

Every staff member considered in this rating shall be able to participate meaningfully in the evacuation of every resident. For example, a staff member, due to his own disability, might be unable to assist one or more physically disabled residents and therefore shall not be included in the rating. However, if a staff member's disability does not limit his ability to assist the residents, then the staff member shall be permitted to be included in the rating.

6.5.2.4

All staff members considered in this rating shall be in the facility when on duty. This rating is based on the assumption that there are staff present when residents are in the facility.

Exception No. 1: Unstaffed facilities, which are not covered by this system, shall be permitted to be assigned an evacuation capability level based on the demonstrated ability of the residents to meet the criteria of Chapter 32 or 33 (NFPA 101), as appropriate, without staff assistance.

Exception No. 2: Residents who receive only the most favorable ratings on Worksheet 6.8.3 for rating residents shall be permitted to be present in the facility without the presence of staff members.

Exception No. 3: A staff member shall be permitted to be at a location outside of the facility where his ability to respond to a fire emergency from the location is roughly equivalent to his response ability from within the facility. In determining equivalency, the authority having jurisdiction should consider the following:

(a) Whether the fire alarm meets the minimum loudness criteria (see 6.5.3.3) at the locations outside the facility or whether another staff member who is required to remain in the facility can immediately report a fire emergency to the staff member who is outside

(b) Travel time to the facility

(c) Detection of fire cues (e.g., smoke, noises) from the locations outside the facility

(d) Whether the staff member will be notified immediately about which area of the facility has the fire emergency, if the staff member who is outside is required to report fire emergencies in more than one facility or fire zone

Exception No. 4: The authority having jurisdiction shall be permitted to grant partial credit (which shall not exceed the promptness of the response score that the staff member receives where required to remain in the facility) for staff members who are permitted at locations outside the facility and who have the ability to respond promptly.

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6.5.2.5

Fire drills shall be conducted monthly, and at least twelve fire drills shall have been conducted during the previous year.

Exception: A facility in operation for less than one year shall be permitted to have conducted a fire drill for each month of its operation.

6.5.3 Staff Scores (Worksheet 6.8.8).

6.5.3.1

The purpose of this rating is to determine which staff shift is likely to be the least able to respond promptly to assist residents in an evacuation. If it is not obvious which staff shift will be the least able to respond, complete separate forms for each staff shift and use the staff shift having the lowest score.

6.5.3.2 Promptness of Response Scores (Worksheet 6.8.7).

6.5.3.2.1 Staff Availability.

This rating determines whether there are circumstances in which a staff member is less able to respond appropriately or might be delayed in his response to a fire emergency. A staff member shall be included in this rating only under the following conditions:

(1) He is required to remain within the facility while on duty.

(2) He sleeps less than 100 ft (30 m) from all locations in the portion of the facility being evaluated.

(3) His travel time to any location in the portion of the facility being evaluated does not exceed 60 seconds.

6.5.3.2.1.1 Standby or Asleep.

This rating means that the staff member does not have specific duties that ensure an immediate response to the alarm but is otherwise available to assist in a timely manner. This includes live-in staff who might be asleep, showering, or otherwise unable to respond immediately.

6.5.3.2.1.2 Immediately Available.

This rating means that the staff member is required to be on duty to provide immediate assistance but is not required to remain in close proximity to the residents (e.g., the staff member is allowed to wash clothes or do bookkeeping).

6.5.3.2.1.3 Immediately Available and Close By.

This rating means that the staff member, in addition to satisfying the requirement for "immediately available," also is required to remain in close proximity to the residents except for brief periods of time.

6.5.3.2.1.4

If the facility is classed as "large" and has multiple fire or smoke zones, some staff members might have responsibilities for residents outside the fire or smoke zone being evaluated. If a staff member's duties include rescue of residents in the fire zone being evaluated, the staff member shall be permitted to be assigned partial or full promptness of response scores. The authority having jurisdiction shall assign the points based on the proximity of the staff member to the zones and the nature of his duties in a fire emergency. This credit shall be given only if there is a smoke detection system that alerts the staff member and a system or procedure for promptly informing the staff member of the general location of the fire.

6.5.3.2.1.5

Individual residents shall be permitted to be assigned responsibilities similar to those of staff members to assist other residents during fire emergencies. The authority having jurisdiction shall be permitted to assign these individual residents as many as 8 points for promptness of response, based on their capabilities and responsibilities.

6.5.3.3 Alarm Effectiveness.

This rating determines whether smoke detector-activated alarm devices are loud enough to alert the staff to a fire emergency dependably.

6.5.3.3.1 Assured.

To be rated "assured," the alarm shall be "easily noticeable" in all locations where the staff member is permitted, regardless of his rating on the promptness of response factor. "Easily noticeable" means the alarm shall be a minimum of 55 dBA measured at ear level. The authority having jurisdiction shall be permitted to require the alarm to be louder than 55 dBA where background noises could interfere with alarm audibility. For example, the alarm might need to be more than 55 dBA in order to be heard over noise such as from a washing machine in the laundry or a television in the day room. If there are staff who are permitted to sleep, the alarm shall be a minimum of 70 dBA measured at "pillow" level in any area where the staff might be asleep. The alarm shall be activated by smoke detectors, an automatic sprinkler system, or both. If the facility has smoke detectors meeting the requirements of Chapter 32 or 33 (NFPA *101*), as appropriate, the smoke detectors shall activate the alarm. If the facility has an automatic sprinkler system whose fire protection properties are considered in the evaluation of the facility, activation of the sprinkler system shall activate the alarm.

6.5.3.3.2 Not Assured.

The alarm does not satisfy the conditions specified under "assured." Doors that normally are closed during the staff shift being rated should be closed when determining the loudness of the fire alarm. Any other barriers that could reduce the loudness of the fire alarm also shall be in place.

6.6 Rating the Facility (Worksheet 6.8.9).

6.6.1

The vertical distance from sleeping rooms to a floor level with exits might affect the risk because of the time and difficulty in moving on the stairs.

6.6.2 Special Definitions.

6.6.2.1 Direct Exit.

Direct exit means that there is no more than one step between the inside of the facility and either (1) ground level outside or (2) a level area outside the facility that is at least 32 ft^2 (3.0 m^2). This level area might be a porch or a stairway landing. Where the vertical distance is greater than one step, a ramp shall be permitted to be used to comply with this definition.

6.6.2.2 Vertical Distance.

Vertical distance refers to the greatest number of floors that separate any resident sleeping room from its nearest direct exit.

6.6.3 All Sleeping Rooms on Floors with Direct Exit.

Every room where residents sleep is on a floor with at least one direct exit. Specific evidence of facilities that fall within this category includes the following:

(1) A one-story building without sleeping rooms in the basement

(2) A two-story building without sleeping rooms on the second floor

(3) A split-level building with direct exits at each level

(4) A two-story building with sleeping rooms on the second floor that has an exterior stairway from the second floor, with a landing at the second floor that is greater than 32 ft^2 (3.0 m^2)

6.6.4 Any Sleeping Room One Floor from Exit.

There is at least one room where residents sleep in which the shortest vertical distance to a direct exit is one floor. Specific evidence of facilities that fall within this category includes the following:

(1) A two-story building with sleeping rooms on the second floor, in the basement, or both

(2) A one-story building where all the exits have stairs that lead to grade without a landing or porch of, at minimum, 32 ft^2 (3.0 m^2)

6.6.5 Any Sleeping Room Two or More Floors from Exit.

There is at least one room where residents sleep in which the shortest vertical distance to a direct exit is two or more floors. Specific evidence of buildings that fall within this category includes the following:

(1) A three-story building with sleeping rooms on the third floor and no exterior fire escape

(2) A three-story building with sleeping rooms on the third floor that has an exterior stairway from the third floor, but where the landing at the third floor is less than 32 ft^2 (3.0 m^2)

6.6.6 Facilities in an Apartment House.

If the facility is located in an apartment house and the unit containing the facility requires ascending or descending stairs to move from any sleeping room to the door to the corridor, a score of 1.2 for "vertical distance from sleeping rooms to exit" should be assigned. In all other apartments, the score for vertical distance from sleeping rooms to exits is 1.0.

6.7 Determining Evacuation Capability (Worksheet 6.8.10).

6.7.1

When the scores for the residents, the staff, and the vertical travel distances have been determined, the scores are entered on Worksheet 6.8.10 and the calculation made to obtain a numerical result.

6.7.2

The numerical evacuation capability score then is translated into a level of evacuation capability of either "prompt," "slow," or "impractical" and recorded on Worksheet 6.8.11. This evacuation capability is a valid assessment that shall be permitted to be used in Chapter 7 of this guide or in Chapter 32 or 33 (NFPA *101*), as appropriate.

6.8 Worksheets for Rating Residents.

Step 1: Complete the cover sheet (Worksheet 6.8.1) found in Figure 6.8.

Step 2: Read Sections 6.3 and 6.4 before filling out Worksheets 6.8.2 and 6.8.3. Complete both forms for each resident, basing the ratings on commonly observed examples of poor performance.

Step 3: Compute the total resident evacuation assistance score.

A. List each resident's name on Worksheet 6.8.4. Use a separate scoresheet for each zone being rated. Use additional scoresheets for a large number of residents.

B. Enter the score from each Worksheet 6.8.3, which was completed for each resident.

C. Total the scores for all residents in the facility or zone being rated, as appropriate.

Step 4: Compute the staff shift score.

A. Complete the cover sheet in Worksheet 6.8.5.

B. Complete Worksheet 6.8.6 for the time of day, week, and so on when the combined ratings for staff and residents yield the highest score. This usually is late at night. Where it is not obvious which staff shift will score highest, complete separate forms for each staff shift and utilize the highest score. Read Section 6.5 before filling out this form.

Step 5: Determine the staff shift score.

Note that in large facilities, staff members might be responsible for assisting residents in a fire or smoke zone but also might have responsibilities for residents in other zones. *(See Section 6.5.)*

A. On Worksheet 6.8.8, list the names of staff members who are required to be on duty in the facility during the shift being rated.

B. Determine whether the effectiveness of the alarm is "assured" or "not assured." *(See Section 6.5.3.)*

C. Using the values from Worksheet 6.8.7, determine each staff member's "promptness of response score" for the shift being rated. Enter each staff member's name and score in the appropriate spaces on Worksheet 6.8.8.

D. Total the "promptness of response scores" for the shift rated.

Step 6: Rate the facility, using Worksheet 6.8.9. Rate the facility by checking the circle that indicates the vertical distance a resident must travel from a sleeping room (SR) to an exit.

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Step 7: Determine evacuation capability. Determine the facility's evacuation capability, using Worksheet 6.8.10. Calculate the score by multiplying the Total Resident Evacuation Assistance Score (Worksheet 6.8.4) by the Vertical Distance from Sleeping Room to Exit (Worksheet 6.8.9) and then dividing by the Staff Shift Score (Worksheet 6.8.8). The evacuation capability is determined and recorded in Worksheet 6.8.11.

Figure 6.8 Worksheets for rating residents.

WORKSHEET 6.8.1 COVER SHEET

Worksheet for Rating Residents

Resident's name _____ Evaluator _____

Facility _____ Zone _____ Date _____

Write any explanatory remarks here:

WORKSHEET 6.8.2 RATING THE RESIDENT ON THE RISK FACTORS

Rate the resident on each of the factors below by checking the one circle for each risk factor that best describes the resident. For the first six factors, write the scores for the circles checked in the appropriate score boxes in the far right column. For "Response to Fire Drills," write the three checked scores in the large circles. Write the sum of the three scores in the large box on the right.

					Score Boxes
I. Risk of Resistance (Check only one)	Minimal Risk ○ score: 0	Risk of Mild Resistance ○ score: 6	Risk of Strong Resistance ○ score: 20		
II. Impaired Mobility (Check only one)	Self Starting ○ score: 0	Slow ○ score: 3	Needs Limited Assistance ○ score: 6	Needs Full Assistance or Very Slow ○ score: 20	
III. Impaired Consciousness (Check only one)	No Significant Risk ○ score: 0	Partially Impaired ○ score: 6	Totally Impaired ○ score: 20		
IV. Need for Extra Help (Check only one)	Needs at Most One Staff ○ score: 0	Needs Limited Assistance from 2 Staff ○ score: 30	Needs Full Assistance from 2 Staff ○ score: 40		
V. Response to Instructions (Check only one)	Follows Instructions ○ score: 1	Requires Supervision ○ score: 3	Requires Considerable Attention/Might Not Respond ○ score: 10		
VI. Waking Response to Alarm (Check only one)	Response Probable ○ score: 0	Response Not Probable ○ score: 6			
VII. Response to Fire Drills (Without assistance or cueing from staff)	Initiates and Completes Evacuation Promptly	Yes ○ score: 0	No ○ score: 8	○ +	
	Chooses and Completes Back-up Strategy	Yes ○ score: 0	No ○ score: 4	○ +	
	Remains at Designated Location	Yes ○ score: 0	No ○ score: 6	○	Sum of These Three Scores

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Figure 6.8 *Continued*

WORKSHEET 6.8.3 DETERMINING THE RESIDENT'S OVERALL NEED FOR ASSISTANCE

Compare the numbers in the seven score boxes filled in. Enter the highest score from the seven boxes (Worksheet 6.8.2) and write it in the box at the right.

Evacuation Assistance Score

Notes:

WORKSHEET 6.8.4 RESIDENT SCORES

Resident's Name	Evac Assist. Score	Resident's Name	Evac Assist. Score
Evacuation Assistance Score Total		Evacuation Assistance Score Total	

Figure 6.8 *Continued*

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WORKSHEET 6.8.5 COVER SHEET

Staff Shift Score

Facility _____ Zone _____

Evaluator _____ Date _____

Staff Shift: From _____ To _____

WORKSHEET 6.8.6 STAFF RESPONSE AND TRAINING

	Yes	No
A protection plan has been promulgated and all staff members considered in this rating have been trained in its implementation. (*See 6.5.2.1.*)		
The total available staff at any given time is able to handle the individual evacuation needs of each resident who is in the facility. (*See 6.5.2.2 and Exception.*)		
Every staff member considered in this rating can meaningfully participate in the evacuation of every resident. (*See 6.5.2.4.*)		
All staff members considered in this rating are required to be in the facility when on duty, except as permitted. (*See 6.5.2.4 and Exception.*)		
At least 12 fire drills were conducted during the previous year. (*See 6.5.2.5 and Exception.*)		

All items must score "Yes" before proceeding.

WORKSHEET 6.8.7 PROMPTNESS OF RESPONSE SCORES

Staff Availability	Alarm Effectiveness	
	Assured	Not Assured
Standby or asleep	10	2
Immediately available	20	2
Immediately available and close by	20	10

WORKSHEET 6.8.8 STAFF SCORES

Staff Name	Promptness of Response Score	Staff Name	Promptness of Response Score
Staff Shift Score Total		Staff Shift Score Total	

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Figure 6.8 *Continued*

WORKSHEET 6.8.9 RATING THE FACILITY

	Vertical Distance from Sleeping Rooms to Exits		
	All SR on Floors with Direct Exit	Any SR One Floor from Exit	Any SR Two or More Floors from Exit
Small Facility	◯ Score 0.8	◯ Score 1.0	◯ Score 1.2
Large Facility or Apartment		◯ Score 1.0	

*NOTE: Small facilities have 16 or fewer residents. See 6.8.5 for qualifiers.

WORKSHEET 6.8.10 CALCULATION OF EVACUATION CAPABILITY SCORE

Total Resident Evacuation Assistance Score (Worksheet 6.8.4) ☐ X Vertical Distance from Sleeping Room to Exit (Worksheet 6.8.9) ☐ X Staff Staff Score (Worksheet 6.8.8) ☐ = Evacuation Capability Score ☐

(go to Worksheet 6.8.11)

WORKSHEET 6.8.11 EVACUATION CAPABILITY SCORE

Evacuation Capability Score	Level of Evacuation Capability	Evacuation Capability for this Facility or Zone
≤1.5	Prompt	
>1.5 to ≤5.0	Slow	
>5.0	Impractical	

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Appendix D

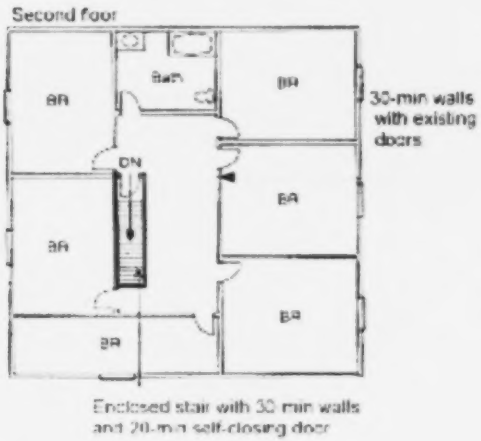
Acceptable Egress Arrangements under Section 9.5 of the Fire Code

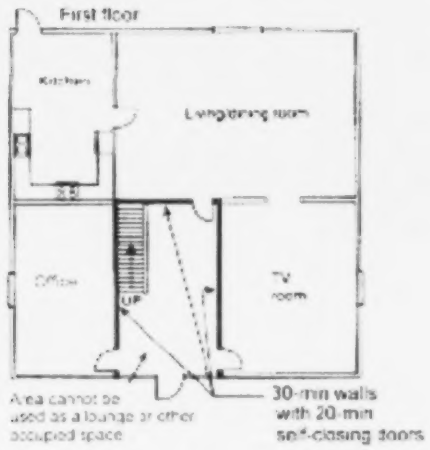
Egress Example No. 1

In this example, the required first and second floor exits are developed by enclosing the main stair at the second storey and by fire separating the foyer from the remainder of the first storey.

Conditions

10 or fewer residents
2 or fewer persons require assistance to evacuate
2 storeys in building height





Additional requirements

Interconnected smoke alarms in corridors [9.5.2.8.(5), 9.5.3.1.(3)]

Fire safety plan implemented for building [9.5.3.1.(3)]

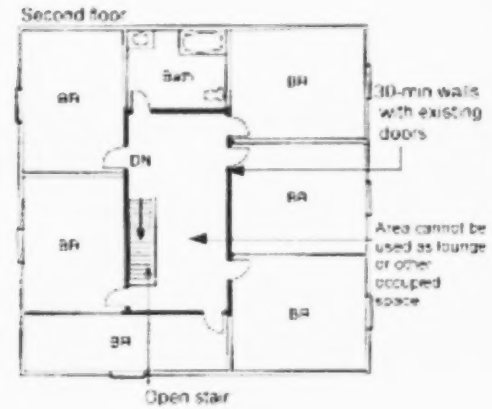
NOTE:
Other requirements in Section 9.5, such as containment and smoke alarms in bedrooms, still apply.

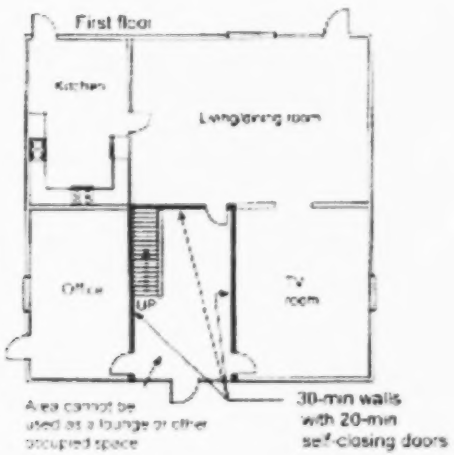
Egress Example No. 2

In this example, the required second floor exit is developed by fire separating the foyer from the remainder of the first storey and by providing alternate egress doors to the exterior from the living, kitchen and office areas. The main entrance door therefore serves primarily as an exit from the second floor.

Conditions

10 or fewer residents
2 or fewer persons require assistance to evacuate
2 storeys in building height





Additional requirements

Interconnected smoke alarms in corridors [9.5.2.8.(5), 9.5.3.1.(3)]

Fire safety plan implemented for building [9.5.3.1.(3)]

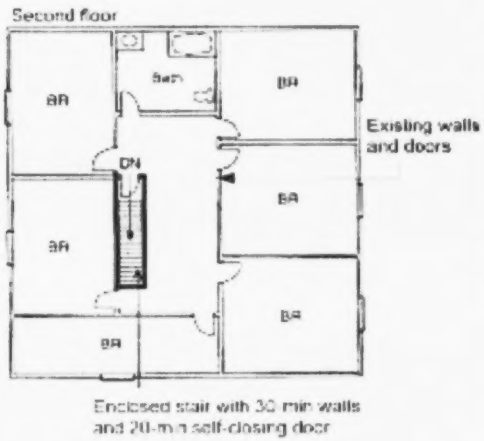
NOTE:
Other requirements in Section 9.5, such as containment and smoke alarms in bedrooms, still apply.

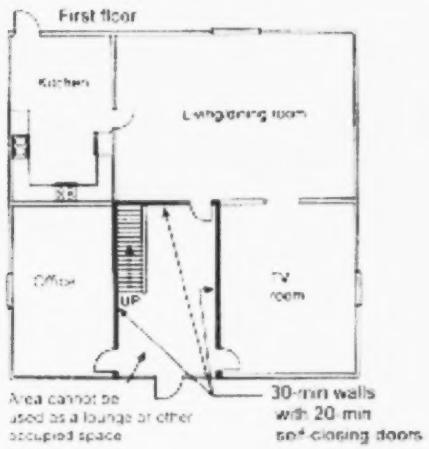
Egress Example No. 3

This example is similar to Egress Example No. 1 except that the corridor walls on the second storey need not have a fire-resistance rating because the building is sprinklered.

Conditions

10 or fewer residents
2 or fewer persons require assistance to evacuate
2 storeys in building height





Additional requirements

Sprinkler building
[9.5.2.7.(3)]

Interconnected smoke alarms in corridors
[9.5.2.8.(5), 9.5.3.1.(3)]

Fire safety plan implemented for building
[9.5.3.1.(3)]

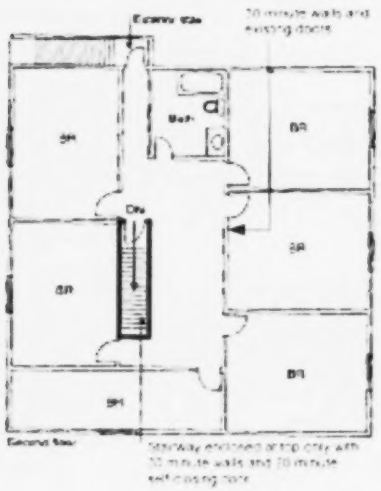
NOTE:
Other requirements in Section 9.5, such as containment and smoke alarms in bedrooms, still apply.

Egress Example No. 4

In this example, a separate exit is provided from the second floor to the exterior. The main stair does not serve as an exit and therefore need only be enclosed at the upper or lower level to maintain the required floor to floor fire separation (the sketch shows the stair enclosed at the upper level).

Conditions

10 or fewer residents
2 or fewer persons require assistance to evacuate
2 storeys in building height



Additional requirements

Separate exit for second floor (interior stair not required as exit)

Interconnected smoke alarms in corridors [9.5.2.8.(5), 9.5.3.1.(3)]

Fire safety plan implemented for building [9.5.3.1.(3)]

NOTE:
Other requirements in Section 9.5, such as containment and smoke alarms in bedrooms, still apply.

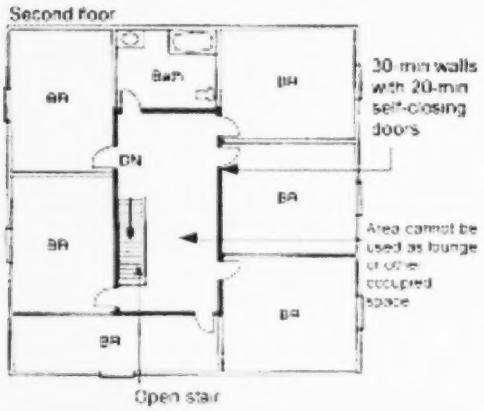
No additional work is needed on the first floor for the egress requirements

Egress Example No. 5

This example is similar to Egress Example No. 1 except that the main exit stair enclosure on the second storey is developed at the corridor walls instead of around the stairs (this arrangement is commonly called a contiguous corridor).

Conditions

10 or fewer residents
2 storeys in building height



Additional requirements

None

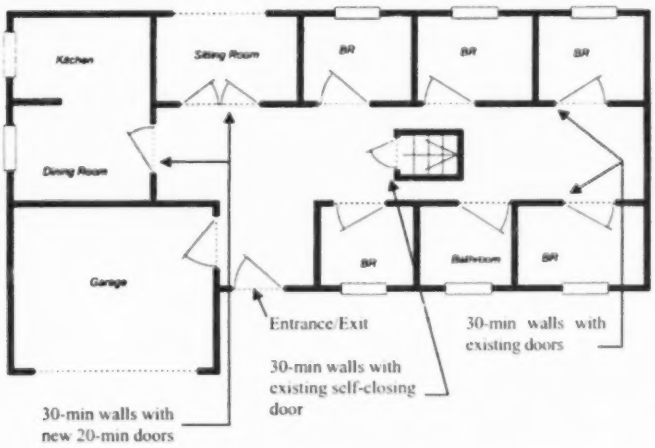
NOTE:
Other requirements in Section 9.5, such as containment and smoke alarms in bedrooms, still apply.

Egress Example No. 6

In this example of a bungalow, all rooms opening onto the corridor access to exit, including the Sitting Room and Dining Room, must be suitably protected with swing type doors that can be latched closed.

Conditions

10 or fewer residents
2 or fewer persons require assistance to evacuate
No occupancy in basement (except storage and furnace room)



Additional requirements

Interconnected smoke alarms in corridor and basement
[9.5.2.8.(5), 9.5.3.1.(3)]

Fire safety plan implemented for building
[9.5.3.1.(3)]

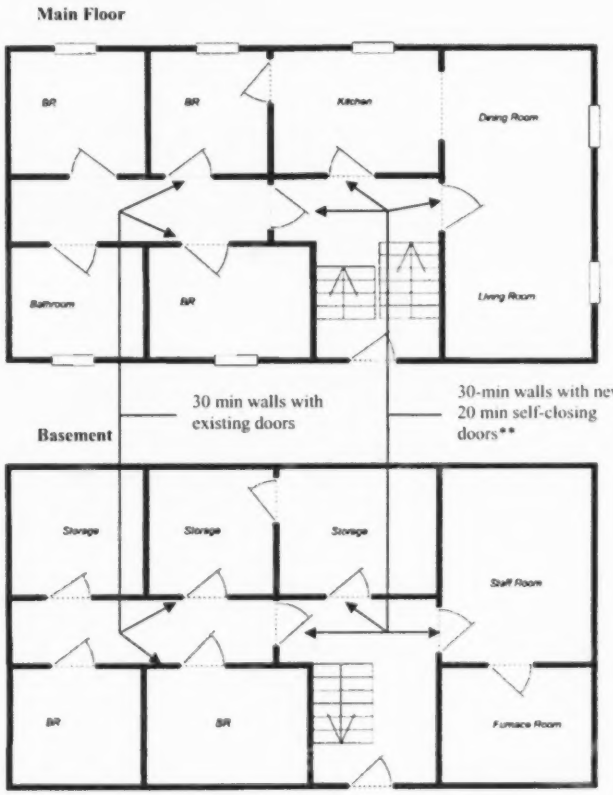
NOTE:
Other requirements in Section 9.5, such as containment and smoke alarms in bedrooms, still apply.

Egress Example No. 7

In this example of a raised bungalow, the Main Floor and the Basement share a common exit that must be fire separated from the remainder of the building with self-closing and latching fire rated swing type doors. All rooms opening onto the corridor access to exits on each level must also be suitably protected with swing type doors that can be latched closed.

Conditions

10 or fewer residents
2 or fewer persons require assistance to evacuate
Less than 400 m^2 in building area



** - doors may be held-open with electromagnetic hold-open devices subject to approval of the fire department

Additional requirements

Interconnected smoke alarms in corridors
[9.5.2.8.(5), 9.5.3.1.(3)]

Fire safety plan implemented for building
[9.5.3.1.(3)]

NOTE:
Other requirements in Section 9.5, such as containment and smoke alarms in bedrooms, still apply.